

## CLAIM AMENDMENTS

1. (currently amended) An information carrier comprising a plurality of detectable elements supported by, or incorporated in a substrate, the elements being spaced apart from one another such that the series of spaces between the elements encodes the information carrier, characterised in that each of the spaces can be represented by  $A + mG$ , wherein A is a first fixed value, G is a second fixed value and m is an integer, ~~(which may be zero)~~ the values of which are derived from the integers of a predetermined mathematical sequence, and wherein the value of A is different to than the value of G.

2. (currently amended) An information carrier comprising a plurality of detectable elements supported by, or incorporated in a substrate, the elements being spaced apart from one another such that the series of spaces between the elements encodes the information carrier, characterised in that each of the spaces can be represented by  $A + mG$ , wherein A is a first fixed value, G is a second fixed value and m is an integer, ~~(which may be zero)~~ the values of which are derived by means of a random number generator, and wherein the value of A is different to than the value of G.

3. (original) An information carrier as claimed in claim 1, wherein the values of the integer m are selected to be integers derived from the output of a de Bruijn sequence.

4. (previously presented) An information carrier as claimed in claim 1, wherein the integers m are selected to be integers derived from the output of a binary pseudo-random sequence generator.

5. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, wherein said fixed values A and G are units of length.

6. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, wherein said fixed values A and G are angles.

7. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, wherein the spacing between adjacent detectable elements is measured from the midpoint of one element to the midpoint of the adjacent element.

8. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, wherein said detectable elements are ~~15~~ magnetically active elements.

9. (original) An information carrier as claimed in claim 8, wherein said magnetically active detectable elements comprise high permeability, low coercivity material having an easy axis of magnetisation.

10. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, wherein said detectable elements are formed of an optically detectable material.

11. (currently amended) An information carrier as claimed in claim 8 wherein ~~said the~~ magnetic properties of each of the magnetic elements serves to encode the information carrier.

12. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, wherein ~~the~~ geometric properties of the elements ~~is~~ are varied such that the relative dimensions of the elements also ~~serves~~ serve to encode information .

13. (currently amended) An information carrier as claimed in claim 11 ~~or 12~~ wherein the magnetic ~~or geometric~~ properties of at least one of the elements is or are known, thereby acting

as a reference element, with respect to which, ~~5~~ the magnetic ~~or geometric~~ properties of the other detectable elements can be determined when decoding the information carrier

14. (currently amended) An information carrier as claimed in claim 11 ~~or 12~~, wherein the a length of the magnetic elements is varied such that the relative lengths of said magnetic elements also serves to encode information.

15. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, wherein said mathematical sequence is a recurring sequence.

16. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, wherein said substrate comprises a linear strip.

17. (currently amended) An information carrier as claimed in any one of claims 1, 2, 3 or 4, 3 or 16 wherein the series of spaces between the elements are chosen such that the encoded information can be determined irrespective of ~~the~~ a direction in which the information carrier is read.

18. (currently amended) An information coding method utilising a plurality of detectable elements supported by, or incorporated in a substrate, the elements being spaced apart from one another such that the series of spaces between the elements encodes the information carrier, characterised in that each of the spaces can be represented by  $A + mG$ , wherein A is a first fixed value, G is a second fixed value and m is an integer (~~which may be zero~~) the values of which are derived from ~~the~~ integers of a predetermined mathematical sequence, and wherein the value of A is different to the value of G.

19. (currently amended) An information coding method utilising a plurality of detectable elements supported by, or incorporated in a substrate, the elements being spaced apart from one another such that the series of spaces between the elements encodes the information carrier, characterised in that each of the spaces can be represented by  $A + mG$ , wherein A is a first fixed value, G is a second fixed value and m is an integer, (~~which may be zero~~) the values of which are derived by means of a random number generator, and wherein the value of A is different to the value of G.

20. (currently amended) An information coding method as claimed in claim 18 or 19, wherein the method utilises an information carrier as claimed in any one of claims ~~3 to 17~~ 1, 2, 3 or 4.

21. (Original) An information coding method as claimed in claim 18 or 19, wherein the encoded information is determined by detecting the spacing between each pair of adjacent elements and expressing the spacings as a sequence which maintains the order of spacings on the tag, but commences with the spacing of greatest magnitude, and wherein if there are two or more spacings equal to the greatest magnitude, the starting value of the sequence is selected such that the sequence, if read as a number, would have the highest possible value.

22. (previously presented) An information coding method as claimed in claim 18 or 19, wherein the encoded information is determined by detecting the spacing between adjacent elements when considered in turn along a predetermined path.

23. (previously presented) An information coding method as claimed in claims 18 or 19, wherein the encoded information is determined by the following steps:

i) determining the sequence of spacings between adjacent elements when considered in turn along a first predetermined path;

ii) determining the sequence of spacings between adjacent elements when considered in turn along a second predetermined path which is opposite in direction to the first predetermined path;

iii) selecting one of the sequences of spacings by performing an iterative comparison of successive spacings in each of the paths, the selected sequence being the first one which generates a larger spacing than the other sequence during said iterative comparison; and

iv) decoding the selected sequence to determine the encoded information.

24. (new) An information carrier as claimed in claim 17, wherein said detectable elements comprise high permeability, low coercivity magnetic material having an easy axis of magnetisation.

25. (new) An information carrier as claimed in claim 24, wherein magnetic properties of each of the magnetic elements serves to encode the information carrier.

26. (new) An information carrier as claimed in claim 25, wherein a length of the magnetic elements is varied such that the relative lengths of said magnetic elements also serves to encode information.

27. (new) An information carrier as claimed in claim 17, wherein said substrate comprises a linear strip.

28. (new) An information carrier as claimed in claim 12 wherein the geometric properties of at least one of the elements is or are known, thereby acting as a reference element, with respect to which, the geometric properties of the other detectable elements can be determined when decoding the information carrier.